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FILE 'HOME' ENTERED AT 16:37:25 ON 19 AUG 2002

=> file medline caplus biosis

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FILE 'MEDLINE' ENTERED AT 16:37:49 ON 19 AUG 2002

FILE 'CAPLUS' ENTERED AT 16:37:49 ON 19 AUG 2002

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FILE 'BIOSIS' ENTERED AT 16:37:49 ON 19 AUG 2002

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=> s (hybrid# or complex##) (10a) immobiliz##

L1 5034 (HYBRID# OR COMPLEX##) (10A) IMMOBILIZ##

=> s (hybrid# or complex##) (10a) immobiliz## (10a) fluorescence

L2 35 (HYBRID# OR COMPLEX##) (10A) IMMOBILIZ## (10A) FLUORESCENCE

=> s l2 and nucleic acid and RNA

2 FILES SEARCHED...

L3 1 L2 AND NUCLEIC ACID AND RNA

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=>

=>

=>

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=> s s

L4 7425101 S

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=>

=> s l3 and solid

L5 1 L3 AND SOLID

=> s l5 and (pyrylium or ethidium or yoyo1)

L6 1 L5 AND (PYRYLIUM OR ETHIDIUM OR YOYO1)

=> s l6 and dry?

L7 0 L6 AND DRY?

=> d l6 bib ab kwic

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

AN 1988:403447 CAPLUS  
 DN 109:3447  
 TI Analytical method and kit for detecting and measuring specifically sequenced **nucleic acid** using fluorescent intercalation compounds and waveguides as **solid** support  
 IN Sutherland, Ranauld Macdonald; Bromley, Peter; Gentile, Bernard  
 PA Battelle Memorial Institute, Switz.  
 SO Eur. Pat. Appl., 50 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 245206	A1	19871111	EP 1987-810274	19870430
	R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
	WO 8706956	A1	19871119	WO 1987-EP234	19870502
	W: AU, BR, DK, FI, JP, NO, US				
	AU 8775838	A1	19871201	AU 1987-75838	19870502
	JP 01500221	T2	19890126	JP 1987-503871	19870502
	FI 8705770	A	19871230	FI 1987-5770	19871230
	NO 8800010	A	19880210	NO 1988-10	19880104
	DK 8800006	A	19880217	DK 1988-6	19880104

PRAI EP 1986-810201 19860505  
 WO 1987-EP234 19870502

AB A waveguide coated with single-stranded probe nucleic acids and carrying an internally reflected wave signal is contacted with an analyte soln. contg. denatured test DNA or **RNA** and fluorescent marker dye. Analyte **nucleic acid** with sequences homologous to that of the probe polynucleotide will hybridize therewith with concomitant binding of the fluorescent dye to the resultant duplex structures. Fluorescence resulting from the interaction of the wave signal at the waveguide/analyte interface with the signal generating centers created within the space probed by the evanescent component of the wave signal is detected and provides useful information on said sequences homologous to that of the probe nucleic acids. A plate waveguide with poly(dA) affixed (prepn. described for oligo dC on aminopropyl glass plate) was affixed into a flow cell and a base-line signal was obtained with buffer in the cell. Both **ethidium** bromide and poly-det were mixed and injected into the flow cell and the reaction was monitored. In a control, only **ethidium** bromide was added. The monitoring reaction was effectively immediate and only specific intercalation between double-stranded DNA was detected.

TI Analytical method and kit for detecting and measuring specifically sequenced **nucleic acid** using fluorescent intercalation compounds and waveguides as **solid** support

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ST **nucleic acid** probe immobilization waveguide;  
fluorescence intercalator DNA detection waveguide

IT Antigens  
Avidins  
Carbohydrates and Sugars, uses and miscellaneous  
Glycosides  
Haptens  
Proteins, uses and miscellaneous  
RL: ANST (Analytical study)  
(in **nucleic acid** probe immobilization on waveguide,  
**nucleic acid** fluorescent detn. in relation to)

IT Waveguides  
(**nucleic acid** probe immobilization on, in  
**nucleic acid** detn., fluorescent intercalators in  
relation to)

IT **Nucleic acid** hybridization  
(to waveguide-immobilized **nucleic acid** probe and  
intercalation of fluorescent dye, in **nucleic acid**  
detn.)

IT Cuvettes  
(waveguides, **nucleic acid** probe immobilization on,  
in **nucleic acid** detn., fluorescent intercalators in  
relation to)

IT Glass, oxide  
RL: ANST (Analytical study)  
(beads, methylglucoside reaction products, for **nucleic**  
**acid** modification for immobilization on grafted waveguide)

IT Dyes  
(fluorescent, intercalation of, in target **nucleic**  
**acid**-waveguide-immobilized **nucleic acid**  
probe hybrids)

IT Spectrochemical analysis  
(fluorometric, of nucleic acids, by waveguide-immobilized  
**nucleic acid** probes and fluorescent intercalators)

IT Virus, bacterial  
(lambda, waveguide-immobilized probe DNA of, and **ethidium**  
bromide, in **nucleic acid** detn.)

IT Nucleotides, polymers  
RL: ANST (Analytical study)  
(oligo-, waveguide-immobilized probe, and fluorescent intercalators, in  
**nucleic acid** detn.)

IT Waveguides  
(optical, fiber, **nucleic acid** probe immobilization  
on, in **nucleic acid** detn., fluorescent  
intercalators in relation to)

IT 25086-81-1  
RL: ANT (Analyte); ANST (Analytical study)  
(detn. of, by waveguide-immobilized poly-dA and **ethidium**  
bromide, fluorescent)

IT 919-30-2, 3-Aminopropyltriethoxysilane 7803-62-5D, Silane, trialkoxy  
derivs.  
RL: ANST (Analytical study)  
(grafting of, on waveguide, for **nucleic acid**  
attachment, **nucleic acid** detn. in relation to)

IT 7601-90-3D, Perchloric acid, salts 7681-82-5, Sodium iodide, uses and  
miscellaneous 9012-90-2, DNA polymerase 9042-14-2D, Dextran sulfate,  
polymers 9068-38-6, Reverse transcriptase 25322-68-3  
RL: ANST (Analytical study)  
(in **nucleic acid** detn. using waveguide-immobilized  
**nucleic acid** probes and fluorescent intercalators)

IT 58-85-5, Biotin  
RL: ANST (Analytical study)  
(in **nucleic acid** probe immobilization on waveguide,  
**nucleic acid** fluorescent detn. in relation to)

IT 1239-45-8, **Ethidium** bromide  
 RL: PROC (Process)  
 (in target **nucleic acid**-waveguide-  
**immobilized nucleic acid** probe  
**hybrids, fluorescence** anal. of)

IT 25191-20-2D, Poly-dA, grafted waveguide reaction products  
 RL: ANST (Analytical study)  
 (poly-dT fluorescent detn. with **ethidium** bromide and)

IT 97-30-3DP, reaction products with controlled pore glass  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, for **nucleic acid** modification for  
 immobilization on grafted waveguide)

IT 25104-18-1DP, reaction products with isothiocyanate-silane graft polymer  
 38000-06-5DP, reaction products with isothiocyanate-silane graft polymer  
 114866-16-9DP, reaction products with polylysine 114866-16-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, in prepn. of waveguide-immobilized **nucleic**  
**acid** probe for **nucleic acid** detn.)

IT 4044-65-9, 1,4-Phenylenediisothiocyanate 25104-18-1, Polylysine  
 38000-06-5, Polylysine  
 RL: RCT (Reactant)  
 (reaction of, in prepn. of waveguide-immobilized **nucleic**  
**acid** probe for **nucleic acid** detn.)

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